

1-1-1991

Neural network opportunity

Steven W. Castelaz

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The Neural Network Opportunity

by

Steven W. Castelaz

An Applied Management

Decision Report

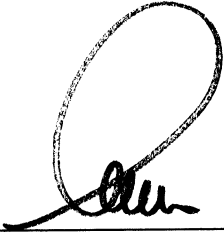
submitted in partial fulfillment
of the requirements for the degree of
Master of Business Administration
Cardinal Stritch College

May, 1991

APPROVAL PAGE

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ABSTRACT

Neural Networks are an emerging computer technology which is attempting to mimic a naturally intelligent network, the human brain. These networks have the potential for performing far beyond the capabilities of the conventional super computer. Neural networks teach themselves as they work. This is unlike Artificial Intelligence systems, which are not capable of teaching themselves.

Neural networks have very strong potential for becoming the way of the future in the computer industry. This technology is already being used by certain industries as well as the government. For instance, neural networks are being used by some brokerage firms to try to learn patterns in the stock and commodities markets. And the government is researching its potential uses for defense purposes.

The purpose of this paper is to determine whether a business specializing in this new technology would be profitable. Encompassed within this analysis will be a detailed description of what must be done to establish this business.

Two alternatives have been proposed. The first is to create a business that would give seminars on the subject of neural networks. The second is to do nothing if analysis shows that the seminar business would not be profitable. Based upon a detailed analysis, the alternative of starting a seminar business is very feasible.

ACKNOWLEDGEMENTS

Without the help and support of several people, this report would have been very difficult to complete. Patrick Castelaz provided much of the technical data I needed regarding neural network technology. I thank him for his help. I received support from both my parents, Harvey and Dorothy, and from my in-laws, Joe and Ruth. I thank them for their support. Last, but definitely not least, I thank my wife, Ruthann, for her patience as well as her unending support during the writing of this report.

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INTRODUCTION

Neural networks are an emerging computer technology which is attempting to mimic a naturally intelligent network, like the human brain. These networks have the potential for performing far beyond the capabilities of conventional super computers. Neural networks teach themselves (learn) as they work. For example, some brokerage firms already have had some success in using neural network applications to learn patterns in the commodities markets. This is unlike Artificial Intelligence (AI) systems. AI systems are not capable of making creative or broad generalizations, but rather are rule-based systems whose answers depend solely on the information programmed into them by a human being.

Artificial Intelligence technology is much more advanced than traditional computer programming languages. By the same token, neural networks are much more advanced and powerful and potentially more useful than AI (See Appendix A).

At this point in time there are no companies which specialize in educating the public in this technology. The existing neural network companies concentrate on actually producing neural network software and hardware. They produce both "canned" neural network software as well as specialized (custom) packages.

There are several seminar companies that are starting to add introductory neural networking courses to their

curriculum, but none that specialize in it or give seminars of any detail in this area.

Neural network technology has the potential to become a dominant force in the future. As companies begin to become aware of the potential applications of this technology, there will be an increasing demand for education in this area. This increased awareness will also cause a demand for consultants who are knowledgeable enough to handle the needs of companies needing specialized help in this area. This is an area that could be investigated at a later point in time as an addition to the seminar business.

Although there is the risk that this technology will not gain popularity in the world, the chances that it will become very popular are much better. This is based on the fact that it will allow computers to analyze data much faster, and by teaching itself as it works, the analysis it does will be much more thorough and therefore the answers will be much more reliable.

DESCRIPTION OF CURRENT SITUATION

Since Neural Networking Consultants, Incorporated (NNCI) has not yet been formed, there is obviously no company background to explain. Therefore, this section will be relatively brief. It will describe the niche of the computer industry that the company is trying to enter as well as its strategy for entering into this niche. The proposed structure of the company and the responsibilities of the key employees will be described in the Analysis of the Problem Section of this report.

Currently, there are no companies who specialize in providing education on neural network technology. The companies dealing in the area of neural networks are manufacturing the actual hardware and software. NNCI is being formed to provide top quality education exclusively for individuals who are currently or are planning on becoming involved with neural network computer technology. This education will be given in the form of seminars ranging from one to three days. The seminars will be based on the current needs of the market. Initially, they will be taught at an introductory level, but will change as the level of detail required by the market increases. An essential key is to keep the content of the seminars at the same level as the current technology.

Due to the newness of both neural network technology and the proposed company, only a limited amount of seminars are

projected to be given the first year. As this technology becomes more popular and NNCI becomes more established, the number of seminars per year will increase. For instance, the number of seminars to be given in the second year of operation is projected to increase by approximately 50 percent.

According to Kotler (1988), the ideal market niche would have the following characteristics:

- 1) the niche would be of sufficient size and purchasing power to be profitable;
- 2) the niche would have growth potential;
- 3) the niche would be of negligible interest to major competitors;
- 4) the company has the required skills and resources to serve the niche effectively; and
- 5) the company could defend itself against an attacking major competitor through the customer goodwill it has built up.

The neural network niche as well as NNCI fulfill the above criteria. For instance, this niche does have tremendous growth potential. NNCI has the required skills and resources to serve the niche effectively. And, at this point in time, NNCI would not be a threat to other major companies in the computer-related seminar business.

IDENTIFICATION OF THE PROBLEM

In a simplistic sense, the problem can be stated as: will a seminar business be profitable enough to support the individuals (and their families) who will be involved in this business? There are two parts to this problem. The first is whether this Neural Network technology will become popular enough to warrant seminars regarding it. If this technology does not become established enough, there will be no need for these seminars. This possibility seems highly unlikely based on the trends of the computer industry. The second part of this problem is whether this business can be financially lucrative enough to be able to allow the individuals within the company along with their families to continue to live in the life-style they are accustomed to within a given time-frame. In the first two years, commitments will obviously have to be made in order to establish the company and its reputation. But after this time period, will financial stability and comfort be realized?

If this technology does not become popular enough to warrant a seminar business such as the one that will be explained in this paper, the individuals involved on a full-time basis would not be able to financially support themselves or their families. Therefore, this business would not be feasible.

The purpose of this paper is twofold: 1) to determine if this business will be profitable based on an analysis of the

industry, the competition, and other relevant factors;
and 2) to describe the detailed projections and plans for the
creation of this business.

ANALYSIS OF THE PROBLEM

Analysis of the Computer Industry

The trend in the computer industry is towards the software and services niches rather than the hardware manufacture and sales segment. The hardware segment is still advancing, but at a much slower pace. There are two major reasons for this. The first is that the market has been saturated with a countless number of "clone" companies. These companies manufacture everything from complete Personal Computers (PCs) to modems and other peripheral devices. Therefore, the environment is becoming extremely competitive. The barriers to entry for a small "start-up" manufacturing company are often too tough to break through. The second reason is that the hardware technology (i.e., the microprocessor chip) has advanced much faster than the software technology. Therefore the software technology must catch up with the hardware. For instance, this can be seen in the PCs using the 80386 microprocessor chip. According to a popular computer publication, "today, four years after the 386 introduction, users are still waiting for a new generation of software that fully takes advantage of the 32-bit architectures of either the 386 or 486" (Datamation Magazine, 1989). The next generation of PC, that with a 80486 microprocessor chip, is very slowly being marketed because of this lag in software development. This demonstrates the slowdown trend in the hardware segment.

As mentioned above, the trend in the computer industry is in the software and software-related services niches. According to the Small Business Administration, programming and related software services are among the six small businesses most likely to succeed in the 1990's.

A widely read computer newspaper states that "the worldwide services industry will grow at a rate of 12 to 13 percent annually during the 1990's, outpacing growth in the hardware industry twofold and reaching between \$180 billion and \$200 billion by 1995, from \$110 billion today" (Puttre, 1990). More specifically, in a survey of 175 industry panelists just done by Anderson Consulting, the "software and professional services segments will grow at a rate of 16 percent annually, to account for about half of the overall growth of the services industry, climbing to \$100 billion by 1995, from \$48 billion this year" (Puttre, p. 39). Anderson Consulting summarized that "services look like the business opportunity of the 90's" (p.39). This forecast for the computer-related services industry coincides with the seminar services business of NNCI.

Analysis of the Neural Network Niche

Neural network technology is not a totally new concept. It was first introduced in the early 1960s. Several factors led to the reduction in funding needed to develop this technology. First, there was a lack of precise understanding as to what this technology could actually do and how it was different than artificial intelligence. Second, "although neural networks were thought to be the way to achieve artificial intelligence, research was squelched in 1969 by two MIT scientists who proved mathematically that neural networks could not perform simple logical functions" (Hazard, 1988). Consequently, neural networks lost favor (and funding dollars) and expert systems won this funding for approximately the next decade. But, "interest in neural networks was refueled in 1982 by researcher John Hopfield of Caltech, who overcame the limitations encountered in the earlier analyses" (Hazard, 1988).

Neural network technology is now being recognized by more industries other than just the government and NASA. Currently, this technology is being aggressively pursued by several large universities and companies in the United States.

"Only in the past two years have the media, and some users, woken up to the potential of this technology that has languished in the laboratories for 20 years. At last, commercially viable products are emerging, and it now remains for the vendors - mainly small privately held US start-ups - to convince the users that the products are useful and easy to use" (Hazard, 1988).

Most neural networks are relatively inexpensive and can be installed on a Personal Computer. The most prominent private start-up companies are SAIC, Hecht-Nielsen, Incorporated, and NeuralWare, Incorporated.

The main user of neural networks to date has been the government. Defense applications are emerging the fastest. These applications include radar systems that might distinguish an airliner from a fighter and "smart" missiles that visually zero in on targets before exploding (Simison, 1988). In addition, applications are being developed for weapon and resource allocation, signal processing, image processing, and signal identification (Castelaz, 1990).

Other industries are starting to experiment with neural network technology. The brokerage firm Morgan Stanley is beginning to use this technology to determine patterns in the various financial markets. They have already found that it is more effective in the commodities markets. The airline industry is considering its use for jet engine fault diagnosis. The banking industry is also looking at this technology. They believe it could be used to help in credit verification and for pattern recognition of signatures (Gabriel, 1990).

According to individuals intricately involved in this field, all that is needed for this technology to really take off is some good publicity and proven applications. It is predicted that the neural network market, which was worth approximately \$20 million in revenues in 1988 and \$60 million

in 1989, will be worth \$1 billion by 1997 and over \$1.5 billion by the year 2000. This market is expected to sustain an average annual growth rate of between 35 and 40 percent through 1995 in the form of new software, hardware and support services.

In addition, the Defense Advanced Research Projects Agency (DARPA) of the Department of Defense is beginning a long-term program to fund research and development in neural networks. Also, a Department of Defense study recommended that the U.S. spend \$400 million over the next eight years to develop neural networks for defense (Simison, 1988).

The potential of this market is already being recognized by conventional computer market leaders such as International Business Machines (IBM) and Digital Equipment Corporation (DEC). IBM is currently "investigating how neural computing can improve its chip development process" (Gabriel, 1990). DEC has entered a joint venture with a small US start-up called Excalibur Technologies, which makes Vax-based pattern recognition software. Moves by industry leaders such as these are "always a good indication of when a technology is about to take off and should help place a stamp of respectability on the products" (Gabriel, 1990). Another large company, Intel, already has incorporated a simple neural network in a speech recognition system. Texas Instruments is also involved in this technology. They have produced some hardware to be used with neural networks. Overall, there are already

approximately 100 commercial ventures providing neural network software and hardware.

Excalibur Technologies is one of two public start-up neural network companies. The other is Nestor Incorporated. Nestor has been in existence for several years and believes they are very close to introducing neural network products that will significantly change the computer industry.

Since there are only two public companies, it is difficult to derive accurate industry averages for financial ratio analysis. But, upon doing ratio analysis on Nestor, their current ratio is 2.46 as of March 31, 1990. It had been as high as 8.44 as of June 30, 1988 and 4.11 as of June 30, 1989 (Nestor, 1990).

According to analysts, this industry will be in the experimentation stage for a while yet. But within the next few years this technology promises to become well known to the public.

Proposed Structure of NNCI

This section will describe the proposed structure of the company and the responsibilities of the key employees. The company (NNCI) will initially consist of four individuals. These four are the:

- 1) President / Treasurer;
- 2) Chief Instructor;
- 3) Vice-President of Marketing; and
- 4) Vice-President of Administration.

The President and the two Vice-Presidents will be principal shareholders in the company and will devote full-time to the business, while the Chief Instructor will work on a part-time basis and will not be a principal shareholder. In addition, there will be an Accountant and an Attorney held on retainer. Additions to the staff will occur in the future based on the growth of NNCI. Refer to Appendix B to review the proposed Organization Chart.

The correct mix of talents needed to successfully run this company is essential. Therefore, a significant amount of time was spent determining the correct individuals for these positions.

The following will explain why the individuals listed on the Organizational Chart were chosen. The author has assumed the position of President. Since the author is the founder of this business, he is the most knowledgeable in all aspects of this proposed corporation.

The Chief Instructor position is being filled by Patrick Castelaz. He is noted as one of the pioneers in the field of

Neural Networks and is continuing to work in the research area of this field at a major corporation in California. He holds a doctorate in Electrical Engineering.

The Vice-President of Marketing position is being filled by John Fessler. He has worked in the marketing field for about 10 years, doing everything from sales to advertising to successfully running his own small business.

The Director of Administration position is being filled by Lawrence Wanta. He has significant experience in many aspects of administration and is currently Director of Administration for a small corporation.

The Accountant on retainer will be Robert Toff. He is a Certified Public Accountant and is working in this field for a major corporation.

The Attorney will be Thomas Foster, who holds a law degree from Pepperdine University Law School. He is currently working for a Fortune 500 corporation.

Each of the four positions listed above will have specific responsibilities as well as some duties that everyone will share. The President will be responsible for coordinating the tasks needed to officially establish NNCI. He will be responsible for obtaining the financing needed to start the business. Once NNCI is formed, he will oversee all facets of the business on a general level. He will also act as the Treasurer of NNCI. He will handle all financial matters (e.g., short and long-term financing, and investments).

The Chief Instructor will be responsible for developing the seminar curriculum and teaching the courses. He will also work with the Vice-President of Marketing in the creation of the advertisements (e.g., brochures) since he is most familiar with neural network technology. In addition, because of his contacts in the neural network field, he will assist in the hiring of additional instructors when deemed necessary.

The Vice-President of Marketing will be responsible for all facets of the promotion of NNCI's services to the company's defined marketplace. This will include the various methods NNCI will use to advertise its service, which will be discussed in the Marketing Strategy section.

The Vice-President of Administration will be responsible for the coordination of the seminars (e.g., times, locations, and accommodations). He will also be responsible for establishing necessary company policies and procedures. In addition, he will have ultimate responsibility for the hiring function. All four individuals will participate in a weekly meeting to discuss the status of their areas.

The individuals mentioned above currently have full-time jobs and are used to a comfortable standard of living. They must realize that for approximately the first two years they will have to make some sacrifices, both financially and emotionally. But, if the growth of the company proceeds as projected, they will be well rewarded. The Compensation Alternatives and the Financial Projections sections discuss these rewards in detail.

Legal Aspects

NNCI will be formed as a corporation rather than a partnership. The reason for this is that in a corporation the liability is limited to the value of the corporation unlike in a partnership where the partners' personal assets can be taken. But the disadvantage of the corporation is that they are double taxed (on revenues and dividends). NNCI will investigate the possibility of becoming a Subchapter S corporation. A Subchapter S corporation combines the best of the partnership and the corporation, because it is taxed only once but has limited liability.

In general, an 'S' corporation does not pay income tax. Instead, the corporation's income and expenses are divided among its shareholders, who must report the income and expense on their own income tax returns. Some of the other qualifications for 'S' corporation status include that it not have more than 35 shareholders, that it not have more than one class of stock issued and outstanding, that it does not own more than 80% of the stock of another corporation, and that the election of S corporation status be made by a qualified corporation (U.S. Master Tax Guide 1989). NNCI meets these qualifications. This matter will be reviewed and pursued if deemed appropriate by the attorney NNCI has on retainer.

Mission Statement

Neural Networking Consultants, Inc. (NNCI) was founded for and will strive to provide quality training exclusively for individuals who are currently or are planning on becoming involved with neural network computer technology. These seminars will be structured based on the needs of the market. Initially, these seminars will be taught at a high-level, but will change as the level of detail required by the market increases. All seminars will be taught by leaders in the field. It is the goal of NNCI to keep the seminars at the same level as the current technology. Therefore, NNCI will continuously review and update the curriculums to ensure that the material being taught is of optimal use to the student.

Compensation Alternatives

The compensation expense is probably the most important factor in the success of this venture next to the revenue projection. There are at least two realistic compensation scheme alternatives for this situation. The first is to base the three full-time members' (the President and two Vice-Presidents) compensation on profits or losses. These three individuals would also become principal shareholders. The second alternative would be to hire these individuals and pay them a fixed salary, plus perhaps a bonus based on a formula (e.g., the number of seminars given and number of students per class). These individuals would not share in the profit or loss of the company. In this alternative, the President would be the sole principal shareholder, and would be the only individual whose compensation is solely based on profits or

losses. In either alternative, since the Chief Instructor will be working on a part-time basis, he will receive a fixed fee for each seminar he teaches, plus a bonus per seminar based on the gross revenue generated. These alternatives will be described in the following paragraphs, along with the reasoning why the first alternative will be the compensation scheme of choice. Finally, the effects of two alternative scenarios will be discussed where actual revenue is twenty percent higher and twenty percent lower than projected.

First Alternative

In the first alternative, the compensation for the President and Vice-Presidents will be based on the revenue produced by the seminars. An amount of \$24,000 for each of the Vice-Presidents, and \$28,000 for the President has been entered as the most realistic salary amount in order to figure the projected net income for the year(s). This amount could be lower depending on the actual revenue generated. This is accepted by these individuals as part of the risk taken as a principal shareholder. The principal shareholders will reinvest any profits over this amount back into the business. The Chief Instructor will agree to a flat fee of \$1,600 per three-day seminar, not including his travel expenses. NNCI will pay for the travel expenses in addition to this fee. This fee equates to approximately \$75 per hour assuming that he will teach for 21 hours (seven hours per day for three days). This fee will increase to \$1,700 per three-day seminar

in the second year, and \$1,800 in the third year. In addition, he will receive a bonus of one percent of the gross revenue produced by the seminar. This amount is based on the number of students attending the seminar. Therefore, this will serve as motivation for the instructor to get people into the class. The bonus percentage will remain at one percent in the second and third year. But, the number of seminars to be taught and the number of students attending in these years is projected to increase significantly, therefore the dollar amount of this bonus will increase correspondingly. This fee structure for the instructor is based on a combination of how the Chief Instructor has been paid in the past for seminars he has taught for his current company relating to this topic. For instance, he taught a seminar at the University of California-Los Angeles (UCLA) and only received a percentage of the gross revenue of the seminar. He did not receive a flat fee. This amounted to approximately \$1,600. In a seminar he taught for the United States Navy, he was paid a flat fee of \$1,500 for approximately 16 hours of teaching, and did not receive a percentage of gross revenue generated. His compensation in both cases did not include travel expenses. Refer to Appendix I to review the calculations involved in this alternative.

Second Alternative

In the second alternative, the two Vice-Presidents will agree to work for a fixed salary of \$23,000 the first year,

with a 20 percent increase in each of the following two years. In addition, the two Vice-Presidents will also receive a bonus identical in structure to that received by the Chief Instructor. The President will be the sole shareholder. The compensation for the Chief Instructor will remain the same as in the first alternative. Refer to Appendix I to review the calculations involved in this alternative.

Preferred Alternative

The alternative of having three principal stockholders and basing their compensation on the revenue generated is the compensation scheme of choice. As a result of discussions with these individuals, they stated that they would prefer to become principal shareholders and have their pay based on revenues generated rather than work for a fixed salary. These two individuals are in a position financially to accommodate this investment. Further, both believe that this method of compensation would provide greater motivation for them to perform. The author agrees with this reasoning. In addition, there would be much less of a financial burden on the author.

Better than expected and poorer than expected scenarios

As mentioned earlier in this section, the actual dollar amounts paid to the principal shareholders may be lower or higher depending on the accuracy of the projections. These individuals are aware of the fact that they will participate in both the losses and profits of the company. A "better than expected" and "poorer than expected" Yearly Compensation Projection scenario has been included to illustrate the

effects of higher or lower than projected revenues. Refer to Appendix J to review the Yearly Compensation Projections associated with these two alternative scenarios. These alternative scenarios reflect both a twenty percent increase and twenty percent decrease in students and seminars. The fee paid to the Chief Instructor will vary according to the amount of seminars taught and the number of students in the class. For instance, according to the most realistic compensation projection for NNCI, he should earn \$17,200 in the first year. This is based on ten seminars with twelve students per class, plus his one percent bonus. If a "better than expected" scenario occurs, the instructor is projected to make \$20,880 in the first year. This increase is due to the increase in the amount of bonus he will receive because of the increase in the number of students and seminars. If a "poorer than expected" scenario occurs, the instructor is projected to make only \$13,600 in the first year. This decrease is due to the decrease in amount of students and seminars. In either case, the fee per seminar that was agreed upon remains the same. The salaries listed for the two Vice-Presidents on the Yearly Compensation Projections for the "better than expected" scenario have been increased by twenty percent in the second and third years. The salaries listed on the "poorer than expected" scenarios have kept constant at the amount listed for the first year rather than increasing twenty percent. These amounts are used to compute the projected net income for

the three years. But since the actual compensation of the principal shareholders is based on actual revenues, the amounts received could be significantly different. As mentioned above, any amounts over the salary amount listed will be reinvested back into the company.

Marketing Strategy

The marketing strategy for NNCI will encompass six major areas:

- 1) the specific target market(s);
- 2) the marketing mix;
- 3) the promotion mix;
- 4) the location of the headquarters office;
- 5) the timing of entry into the seminar market; and
- 6) an evaluation of the marketing strategy.

Each of these areas will be discussed in detail.

Target markets

The first area to be discussed is the specific target market(s). There are three major market segments NNCI could pursue. They are the government, the academic world, and industry. NNCI must look at the segments which are using neural networks the most currently. At this time, the government is the biggest user of this technology. This fact in combination with the fact "that government agencies buy an amazing range of products and services" (Kotler, 1988, p.228) make this a segment with great potential. Therefore, the primary target market will initially be the government. More specifically, specific branches of the federal government,

such as the Department of the Defense will be pursued. The secondary target markets will be industry and the academic world (i.e., universities). As these segments become more aware of neural networks and start to use them, they will be pursued more intensely. These target markets will be reviewed frequently to ensure that NNCI is still pursuing the market segment with the most potential.

The proposed Chief instructor has given seminars on neural network technology through his current employer. Based on these seminars, he has stated that the audience is approximately 40% government, 30% industry, and 30% from the academic world. Most of the government work he is currently doing is for the federal government.

The geographic locations of the primary target market of NNCI are somewhat limited by the locations of the particular branches of the federal government they are pursuing. For instance, one of these branches is located in Alabama. In regard to industry and the academic world, NNCI is not as restricted. NNCI has targeted several northeastern states, two midwestern states, and California as target locations for these segments (Appendix C). The company chose these because they are in geographic areas most noted for high-technology computer industry. These areas are also the home of many of the most prestigious universities.

Due to the nature of the seminar business, the majority of business for NNCI will be with one-time customers. Although, as neural network technology advances, and NNCI

expands its seminar curriculum, they may have some repeat customers. It is the goal of NNCI to impress the one-time customers enough that they will recommend NNCI to their colleagues. These recommendations will be extremely important, especially in the first few years.

Marketing mix

Marketing mix, the second area of marketing strategy to be discussed, is defined as the set of marketing tools that a firm uses to pursue its marketing objectives in the target market (Kotler, p.71). This mix is commonly referred to as the four P's: product, price, place and promotion. In the case of NNCI, the product is the seminar service. Since NNCI is a small start-up company, it must give very high-quality personalized service. For instance, NNCI should stress that seminar classes will be kept to a certain size limit in order to give more personalized education. This is necessary to differentiate itself from the bigger, more impersonal seminar companies. It is also necessary to build the business based on recommendations from its customers.

The second component of this marketing mix is pricing. Since NNCI is entering a new niche within the computer seminar industry, there is no direct historical pricing data on which to base its seminar pricing. Therefore, NNCI is basing the prices for its seminars on an average "going-rate" price of currently successful computer seminars being given across the country. An analysis of prices charged by seminar companies for seminars on computer-related topics ranging from very

technical to very general was performed (Appendix D). The results showed that the average price of a two-day seminar was approximately \$860, and a three-day seminar was approximately \$1030. This method of pricing can be used effectively as long as it covers all anticipated expenses and generates the projected profit. NNCI will initially offer three day seminars at \$1000 per student. According to the Chief Instructor, who has taught several seminars on neural networks as part of his job at a large manufacturing company, this price is reasonable and in line with the going-rate in the market. The seminars he has taught charged \$1000 to \$1200 tuition for a three-day seminar. By charging \$1000 per person for a three-day seminar, the projected income can be attained. In the subsequent years of operations, this price will be adjusted based on industry prices. It is anticipated that these prices will increase ten percent in each of the second and third years. NNCI will have to monitor the price elasticity of demand for their service because they need to know how responsive demand would be to a change in price. If demand changes significantly with a change in price, the demand is considered to be elastic. If demand changes very little with a change in price, it is considered to be inelastic. Demand is likely to be more inelastic if buyers think the higher prices are justified by the quality improvements or if there are few substitutions for this service (Kotler, 1988, p. 500-501).

The third component of the marketing mix is the place. NNCI will give seminars in traditional locations such as hotels around the country. The specific locations will be based on the geographic locations of the target market(s) of NNCI. For example, NNCI will most likely be giving seminars in the high-technology areas of the country such as northern California. NNCI will also offer to give "in-house" seminars to companies who desire it. This would benefit both the specific company and NNCI. It would benefit the company for three reasons. First, it would allow more of their employees to attend because a fixed group rate tuition would be charged. Second, the company would save a significant amount of money on travel expenses it would incur if the employees had to be sent to an outside location for the training. Third, the seminar could be tailored to the specific needs of the company. In-house seminars would benefit NNCI because they would not incur several charges they normally would if done at a hotel. Obviously, they would not incur a charge for renting the facility at the hotel. Also, in many cases they would be able to charge the company for travel expenses, such as airfare, hotel, and meals. And, depending on the size of the class, they may be able to charge a total tuition fee higher than what would be received in a hotel setting. An example of this is with the company at which the author currently works. They use in-house seminars to educate their employees. The company pays a flat fee for a pre-defined number of attendees and a set additional amount for each employee over that pre-

defined number. In addition, they pay for all of the instructor's expenses including transportation (e.g., airfare), meals, and hotel. In summary, with in-house seminars both the specific client company and NNCI would benefit.

The final component of the marketing mix is promotion. This topic will be discussed as part of the promotion mix of the marketing strategy of NNCI.

Promotion mix

Promotion mix is the third area of marketing strategy. A major part of the promotion mix is the program developed to advertise the service offered by NNCI. There are five components that must be addressed in this plan. The first is to determine the advertising objectives. In this case, the mission is to inform the public about NNCI and the type of service it offers. NNCI must make the public aware of this alternative to the seminars offered by the larger, more impersonal seminar companies. A second objective is to persuade the public to try this service and to recommend it to their colleagues. In other words, how does NNCI get them to actually sign up for the seminar. This topic will be explained below in the discussion of the fourth component of the advertising program.

The second component of the advertising plan is to determine the amount of money that can be spent on advertising. NNCI will use the objective-and-task method (Kotler, 1988, p.605) to determine the amount that can be spent. This method determines the advertising budget by

defining the specific objectives, determining the tasks that must be performed to accomplish these objectives, and estimating the costs of performing these tasks. The sum of these costs is the proposed advertising budget. The specific objectives have been defined in the preceding paragraph. The task necessary to accomplish these objectives is to make the correct audience aware of this service. An analysis of the sum of these costs shows that it will cost approximately \$1000 in advertising expenses per seminar in the first year (Appendix E).

The third component of the advertising program is to determine specifically the message to be sent to the public. In the message NNCI must emphasize the major benefits of what they have to offer. The company must stress the quality of instruction they offer. For instance, NNCI has an instructor who is a pioneer in the field and has the ability to relate the information to all levels of students. The instructor will be able to teach the basics of neural network technology as well as the more complex components if necessary. This company must also stress the smaller, more personalized education they offer.

The fourth component of the advertising program is to determine the type of media that will be used to relay this message. NNCI must find the most cost-effective media to deliver the message. NNCI will use several traditional types of media to attract customers and actually get them to sign up for the seminar. One method to be used will be direct

mailings to individuals in specific niches of the computer industry. The advantage of direct mailing is that the specific audience can be picked, it is fairly inexpensive as compared to some other media forms, and there will be no direct advertising competition. The Chief Instructor will be able to point out appropriate niches due to his work and contacts in the field. The disadvantage is that the direct mailing literature may carry the image of being junk mail. Another method will be to advertise in trade publications. The major advantage of advertising in trade publications such as data processing magazines and newspapers is that it will reach a wide number of individuals throughout the country that would not be reached through direct mailings. The potential disadvantage is that these advertisements may not generate enough business to justify their costs. But this is a chance that is taken with any type of advertising. Therefore, this is not a major disadvantage. Another type of advertising that will be very helpful in getting individuals to sign up for these seminars is the participation of NNCI in computer trade shows in strategic locations throughout the country. At these trade shows, NNCI will have the opportunity for "one-on-one" contact with potential customers. The company will be able to describe why these more personalized seminars will be of great value to them. At these shows, NNCI could offer a discount (e.g., 10 percent) on the seminar price for those who express an interest in the seminars. NNCI could also set up a drawing where the winner would receive a free seminar. This drawing

would also help to expand the mailing list of potential students. In order to stay competitive in the seminar business, NNCI would offer a guarantee on its seminars. A refund would be offered to any customer that was not satisfied with the seminar. This offer is not as risky as it sounds. Based on the past experiences of the author, the vast majority of people will not ask for a refund after attending a seminar even if they were not fully satisfied. This point was substantiated by the other potential officers of NNCI based on their experiences. Finally, NNCI could ensure that students receive Continuing Education Units (CEU's) for attending the seminar. This would be helpful for those individuals who need to fulfill various types of accreditation requirements. Two other types of media which are not so traditional, but are very effective are personal contacts of the NNCI officers already established with the computer user community, and referrals from clients to their colleagues. These two types of media will play a very important role in the advertising of this new business. The Chief Instructor will play an important role in obtaining potential customers through his personal contacts. Also, since he will receive a bonus based on the number of attendees per seminar, he will be especially motivated to attract customers. The President also has contacts in the computer industry as a result of working in the field for approximately ten years. These contacts will prove to be valuable. All the advertising methods mentioned above should help to actually get the customers "in the door".

The final component of the advertising program is evaluating how effectively the advertising program is working. NNCI must somehow determine if its advertising has increased its sales. The company can determine this with its direct mailings by closely monitoring the ratio of responses to the number of individuals mailed to as they modify their advertising brochures. If this ratio increases, they can attribute it to a more effective advertisement. It is harder to evaluate the success of their advertisements in the trade publications. NNCI will have to try to determine how the customer heard about NNCI. In evaluating the effectiveness of the advertising program, NNCI will have to keep in mind that sales are influenced by other factors besides advertising. For instance, sales could be influenced by the price that is charged or by the actions of other companies in the seminar business. Nevertheless, this evaluation process is a very important part of the advertising program.

Location of the headquarters office

The location of the headquarters office of NNCI is not of critical importance because NNCI personnel will be travelling to the customer rather than the customer coming to the NNCI headquarters location. Two locations are being considered. The first is in the southern California area. The advantage to this location is that it is close to one of the major high-technology areas of the country. The disadvantage is that it is in an area where office space is very expensive. The second potential location is in a midwestern state such as

Wisconsin. The advantage is that the cost of office space is very reasonable. NNCI will need approximately 1500 square feet of office space. In California, this amount of office space would cost approximately triple the amount of a comparable office in Wisconsin. But the disadvantage is that it is not as close to a major high-technology area of the country. Due to the fact that the office space is much less expensive and it is not of critical importance due to the nature of its business, NNCI will make its headquarters in Wisconsin.

Timing of entry into this market

A critical part of this marketing strategy is to determine exactly when to enter this market. It is very important not to enter this market too early. There must be enough of the computer user community that could be attracted to learning about this technology. On the contrary, NNCI can not wait too long to enter into this niche. A major advantage is that there are no other companies in this niche. Therefore, the barriers to entry are not strong. The state of the economy must also be considered when trying to determine the correct entry point. The consensus of the nation's economists is that while the economy is in a recession now, there is a good possibility that the country could begin another business expansion by mid-1991 (National Association of Business Economists, 1990). Based on the current state of the economy, and the analysis of the computer industry in general and the neural network niche in particular, NNCI

should enter the market in mid-1991. One variable that could affect this entry point is the effect of the major role the United States has taken in the war in the Persian Gulf. This is another reason why NNCI should wait until mid-1991. Now that the war has ended, its impact on the economy should be evaluated to determine if this entry point remains optimal.

Evaluation of the marketing strategy

The last of the six major areas of the marketing strategy to be addressed is the evaluation and control process of the performance of the marketing strategy as a whole. NNCI must monitor and control marketing activities on a regular basis. There are four types of marketing controls that must be implemented (Kotler, 1988, p.729-752). The first is annual plan control. This involves monitoring the current marketing efforts and results to ensure that the annual sales and profit goals are being achieved. If it is evident that these goals are not being met, NNCI can implement corrective measures such as a reduction in prices. The second control is profitability control. This involves determining the actual profitability of the specific services or products. In the case of NNCI, this is closely related to the first control since, at this point, the company is only offering one type of service. Nevertheless, NNCI should review their target markets to ensure they are still have the most profit potential. They should also review whether specific types of variations of seminars could be implemented to better serve the market. For example, would two-day or four-day seminars be more

profitable? The third control is the efficiency control. This entails increasing efficiency of certain marketing activities. For instance, NNCI must review if they are still using the most efficient ways to advertise their services. The final control is strategic control. This involves ensuring that the marketing objectives and strategies of NNCI as a whole are still functioning optimally in the current environment. The computer industry and the economy are constantly changing. NNCI must be very aware of this and adapt when and where necessary.

Financial Projections

Three scenarios have been analyzed in relation to the financial projections for NNCI. The first is what is considered to be the most realistic net income projection for NNCI. The second scenario analyzes the effects of a twenty percent increase over the realistic projections. The third scenario analyzes the effects of a twenty percent decrease over realistic projections. The most realistic projection of net income will be discussed first along with a description of each of the components making up the projected income statement. Finally, the effects of the alternative scenarios will be discussed.

Most realistic net income projection

According to the most realistic Projected Income Statement presented in Appendix G, NNCI will turn its first profit in the 13th month of its existence. It is projected that in the first year of operation NNCI will have a net loss of \$50,734. In the second and third year, a net profit of \$19,104 and \$137,580 is projected, respectively. The break-even point for NNCI will be in the twenty-seventh month of operation. This is defined as the point where the sum of the monthly net profits is greater than the total net loss to date. In months thirteen through twenty-six, a total profit of \$41,234 is projected. In the twenty-seventh month, a net profit of \$12,265 is projected. This added to the \$41,234 will total \$53,499. This is \$2,765 more than the \$50,734 total loss. The following will describe and justify how this

conclusion was determined by describing each of the items on the Projected Income Statement in detail.

All the items to be described below are based either on information obtained from interviews with professionals in the specific area (e.g., insurance) or from data accumulated based on the current average market prices for the service. In addition, the amounts for several of these items are increased in years two and three in order to compensate for inflation. Included in these increases will be seminar fees, salary expenses, the hotel facility rentals, overhead, advertising, insurance, and rent expenses. On average, these items have been increased by approximately ten percent. Each item will be discussed in the order that it appears on the Projected Income Statement.

Seminar income is the tuition fee charged to the students. Based on information obtained from the proposed Chief Instructor, who has taught seminars on neural networks for the large manufacturing corporation he currently works for, the following has been determined to be a realistic goal. In the first year of operation, NNCI is targeting ten seminars with twelve students per seminar. The tuition fee will be approximately \$1000 per student. This price is very competitive with other companies currently in the seminar business. Total projected seminar income for the first year is \$120,000. In the second year, NNCI will target fifteen seminars with fifteen students per seminar. The tuition fee will be approximately \$1100. Total projected seminar income

for the second year is \$247,500. In the third year, NNCI will strive to give twenty seminars with eighteen students per seminar. The tuition will be approximately \$1200. Total projected seminar income for the third year is \$432,000.

Salary expenses are projected to total \$93,204, \$119,172, and \$149,760 for years one, two, and three, respectively. These amounts are based on projected monthly compensation for the three full-time members of the company and the fee paid to the Instructor. In addition, a bonus is given to the instructor for each seminar he teaches. This bonus will be one-percent of the gross revenue generated for the particular seminar. In addition, his fee for teaching a seminar will increase \$100 in year two and three. Also, a 20 percent salary increase is planned for each full-time member of NNCI in the second and third year. Refer to Appendix I to review the detailed breakdown of these salary calculations. Payroll taxes are calculated at approximately ten percent of the gross monthly salary amount.

Supplies are defined as the small items needed on an everyday basis for the office. A total of \$300 per month is allotted for supplies. Included would be paper, tape, staples, and any other small items necessary to run the office effectively. This amount may be a bit excessive, but if the money is not used for this, it can be used for something else needed to run the business effectively.

The hotel rate of \$300, \$350, and \$400 in years one through three, respectively is based on the average "going" rate in the market.

Travel expenses are projected to be \$19,992, \$30,000, and \$39,996 in years one through three, respectively. This is based on the number of seminars given per year. The travel expenses will include airfare and living expenses during the seminar. The seminars will be three days in length. NNCI will send two individuals to each seminar. In addition, \$2,000 is allotted for travel expenses before NNCI operations officially begin. The purpose for this will be advertising and the coordination of plans necessary for the first month of operation. The average travel expense per month will be \$1,666 in the first year, \$2,500 in the second year, and \$3,333 in the third year. Refer to Appendix K to review these calculations in more detail.

Overhead expenses are estimated to total \$10,800, \$11,800, and \$13,068 in years one through three, respectively. These overhead expenses consist of utilities including electric, gas and telephone expenses. Also included will be any legal and accounting fees incurred.

Advertising expenses are projected to be \$12,538, \$24,744, and \$41,196 in years one through three, respectively. This is based on the number of seminars given per year. The advertising expenses will include all costs for making the public aware of this service (e.g., advertising in magazines). The average cost per month will be \$958 in the first year,

\$2,062 in the second year, and \$3,433 in the third year. In the first month of operation, the advertising expense will be \$2,000 rather than \$958. This is allotted to help initiate the advertising program. Refer to Appendix E to review in more detail how these advertising expenses were calculated.

The insurance expense will be \$5,400, \$8,400, and \$9,600 in years one through three, respectively. In addition, an initial premium of \$1,800 will be paid before the first month of operation, bringing the total insurance cost for the first year to \$7,200. This insurance will consist of life and disability insurance for the four officers of NNCI. Life insurance is needed in order to secure a line a credit if needed in the future.

Miscellaneous expenses are estimated to be \$3,600 in each of the first three years. This will be used for both unexpected expenses and known expenses which have been underestimated.

The final operating expense is rent. Rent is projected to be \$8,400, \$9,600, and \$10,800 in years one through three, respectively. This is based on \$700 per month the first year, \$800 the second year, and \$900 the third year. NNCI will not need a very large office since most of its work will be done outside of the office. In the city of West Allis in Milwaukee County, an office with adequate space for the offices NNCI requires will cost about \$700 per month.

Better than expected and poorer than expected scenarios

The second and third scenarios analyze the effects of a twenty percent increase and decrease over the realistic net income projections. In these scenarios, five components in addition to the net income figure of the Projected Income Statement have been impacted. They are seminar income, salaries, payroll taxes, supplies, and travel expenses.

An increase of twenty percent will cause the number of seminars given to increase by two in the first year, three in the second year, and four in the third year. It will also cause the number of students to increase by two per seminar in the first year, three in the second year, and four in the third year. This will result in an increase in seminar income of \$48,000, \$108,900, and \$201,600 in years one through three, respectively. A twenty percent decrease will cause the number of seminars given to decrease by two in the first year, three in the second year, and four in the third year. It will also cause the number of students to decrease by two per seminar in the first year, three in the second year, and four in the third year. This will result in a decrease in seminar income of \$40,000, \$89,100, and \$163,200 in years one through three, respectively.

This increase in seminar income will cause an increase in the monthly salary paid of \$3,672 in the first year, \$6,192 in the second year, and \$9216 in the third year. This is due to the additional seminars taught which will increase the amount of compensation paid to the Chief Instructor. A decrease in

seminar income will result in a decrease in salary expense of \$3,600, \$21,192, and \$42,276 in years one through three, respectively. This is due to fewer seminars being taught and therefore less being paid to the Chief Instructor.

Payroll tax increases and decreases will correspond directly to the salary increases and decreases.

Supplies will increase \$1,200 in each of the three years due to the increase in the number of seminars with a twenty percent increase over realistic projections. This amount will decrease by the same amounts with a twenty percent decrease from projections. Refer to Appendix H to review the Projected Income Statements relating to these two scenarios.

The final component impacted is travel expenses. A twenty percent increase over realistic projections will cause an increase in travel expenses of \$4,000, \$6,000, and \$8,000, in years one through three, respectively. This is due to the increase in the number of seminars that will be given. These expenses will decrease by the same amounts with a twenty percent decrease from projections. Again, this is due to the decrease in the number of seminars given. Refer to Appendix L to review the Travel Budgets relating to these two alternative scenarios.

In summary, with a twenty percent increase over realistic net income projections, the net loss projected in the first year will be only \$11,614 instead of \$50,734. Net income will increase to \$114,614 from \$19,104 at the end of the second year. By the end of the third year, net income will increase

to \$320,760 from \$137,580. This is a very substantial increase which should make the members of NNCI very happy. But, with a twenty percent decrease from projections, a net loss of \$81,938 versus \$50,734 is projected at the end of the first year. At the end of the second year NNCI will show a loss of \$41,604 versus a profit of \$19,104. At the end of the third year NNCI will finally show a small profit of \$27,048.

Therefore, actual results as compared to projections must be monitored carefully. If NNCI is still performing at about twenty percent below projections at the end of the second year and does not foresee significant improvement potential in the third year, the officers of NNCI may want to seriously consider whether they should continue this business.

DESCRIPTION OF POTENTIAL SOLUTIONS

There are two potential solutions to this problem. This section will state these two possible solutions and will explain why the first potential solution is an undesirable alternative.

The first alternative is to "do nothing". In other words, based on the research performed, from both a financial as well as an economic viewpoint, it will have to show that it would not be profitable to pursue some type of business capitalizing on neural network technology. On the contrary, based on this research, it will be profitable to pursue a specific type of business in this area.

The second potential solution is to create a business that focuses solely on seminars on neural networks. This is the solution of choice which will be described in detail in the Resolution section.

RESOLUTION

The optimal resolution at this point in time is to create a business that would solely give seminars on neural networks. This type of business is appropriate and preferred over the other potential solution for several reasons. First, there are no companies in this specific business yet. There are many companies that give seminars on computer-related topics, but none that focus solely on the subject of neural networks. These companies would not initially be threatened by the entrance of NNCI into this niche of the seminar market. Second, the research performed throughout this report shows that the potential for substantial profit exists in this niche. There will be an initial period of time when this business will be unprofitable. This is normal and expected. But, if the business matures as projected, NNCI will become a very profitable corporation. It will be financially lucrative enough to allow the individuals within the company along with their families to continue to live in the life-style they are accustomed. Finally, the computer user community is not yet knowledgeable enough on the potential uses of neural networks.

A major purpose of NNCI will be to educate the user community on the uses of this technology. Once this community becomes aware of the potential uses of neural networks and they start to create a demand for it, there will be a market

for consulting. But until this occurs, a seminar business will have much more profit potential.

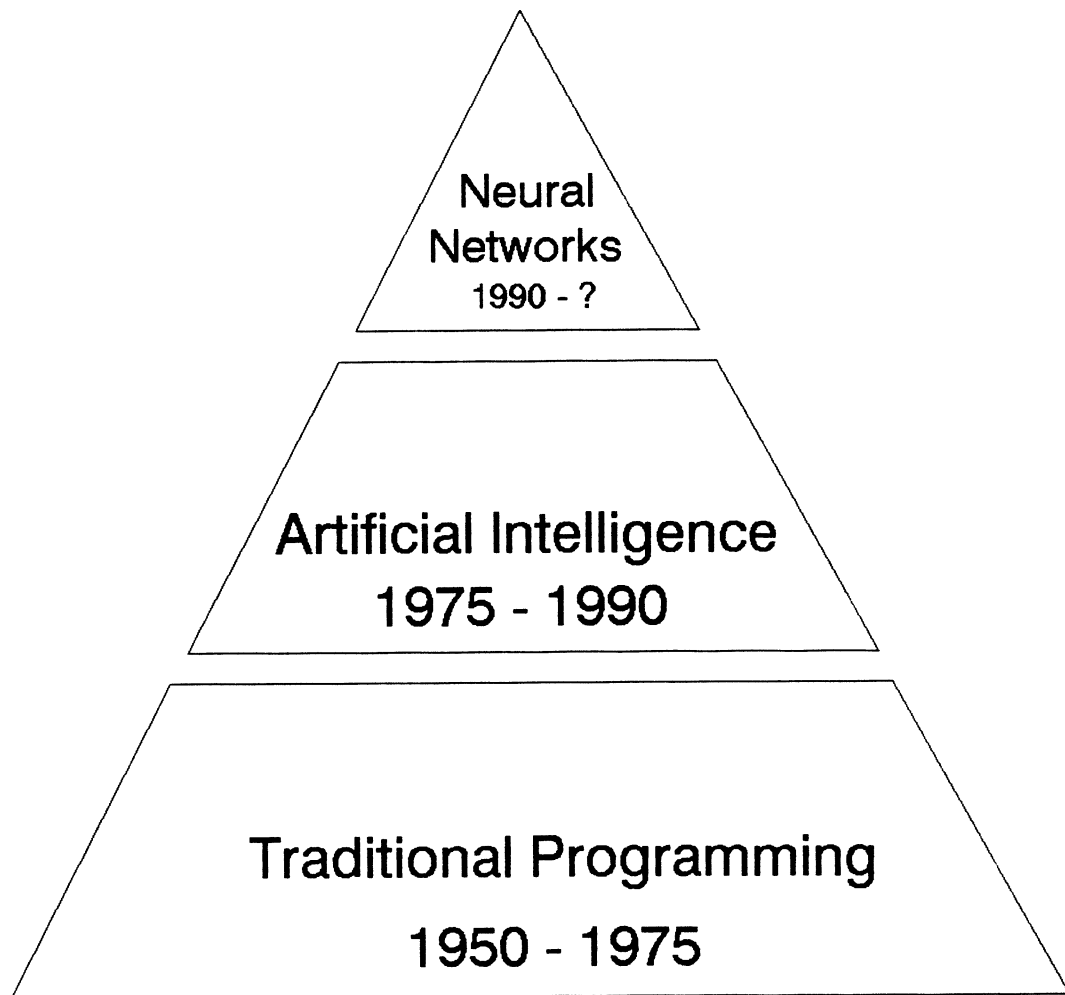
The members of NNCI must accept the fact that the first two years of operations of NNCI will require a major commitment of time and energy. While these individuals will receive a certain level of compensation, it may not be in the amount that they are accustomed. They must realize that this will only be a temporary situation if the company matures as projected. If they can commit the time and skills necessary, there is very strong potential that they will be well rewarded, both financially and emotionally.

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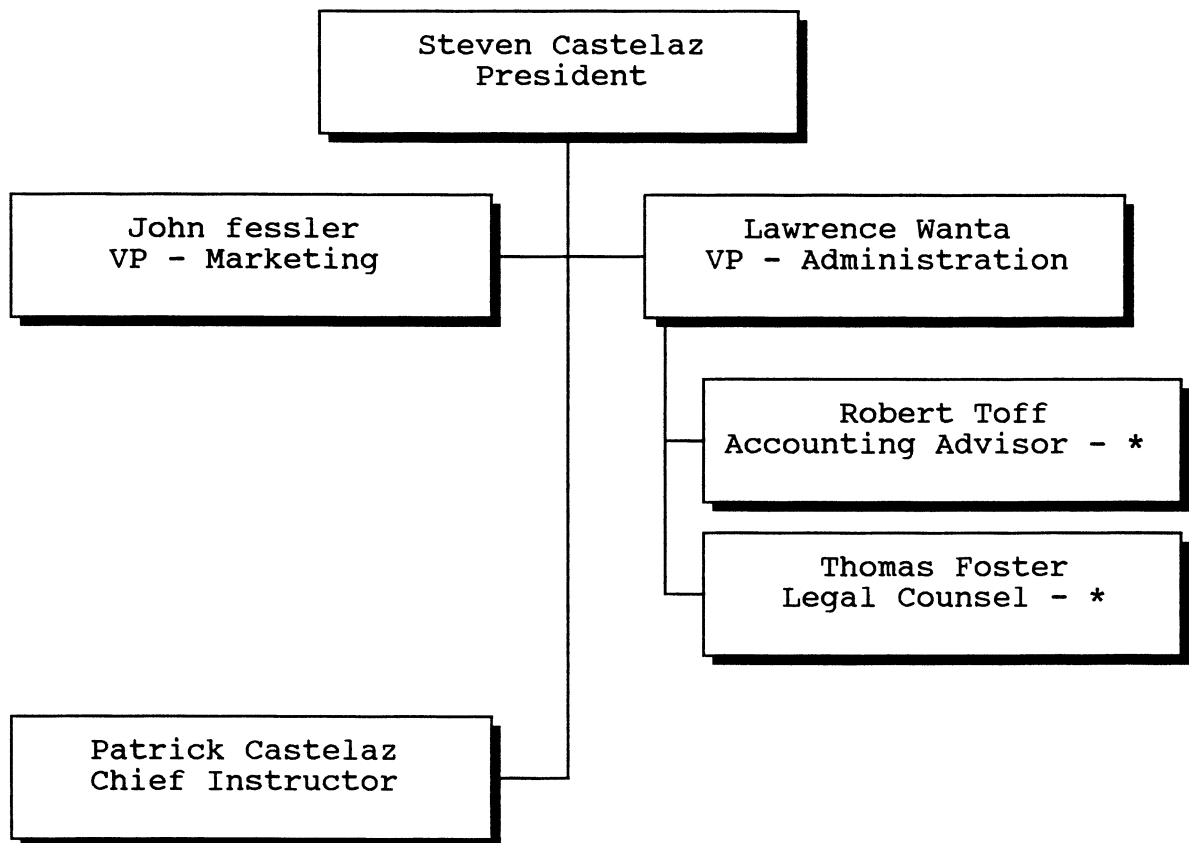
APPENDIX A
Evolution of Neural Networks

Evolution of Neural Networks



APPENDIX B
Organization Chart

Neural Networking Consultants, Inc.
Organization Chart
June, 1991



* - Not a full-time salaried position;
Pay based on services rendered.

APPENDIX C
Potential Target Markets

NNCI – Potential Target Markets



APPENDIX D
Average Seminar Prices

AVERAGE SEMINAR PRICES

Seminar Title	Location	Length In Days	Price
Expert systems & NN's (International Business Comm.)	New York	2	\$895
Artificial Intelligence (Inst. for Adv. Tech.)	Minneapolis	2	\$895
Advanced MS-DOS (American Institute)	Chicago	2	\$795
	2-day	Average =	=====
			\$862
Intro to NN Technology (Inst. for Adv. Tech.)	Various Cities	3	\$1,095
Intro to the Computer (American Mgmt Assoc.)	Chicago	3	\$915
How to Use Your PC (American Mgmt Assoc.)	Chicago / New York	3	\$950
Small Computer System Conference (Gartner Group, Inc.)	Monterey, CA	3	\$1,450
Intro to Neural Networks (Univ. Cal. Los Angeles)	Los Angeles	3	\$1,000
Using AI & Expert Systems In Auditing (MIS Training Institute)	San Francisco	3	\$795
Applied Neural Networks (Institute for Professional Education)	Various Cities	3	\$995
	3-Day	Average =	=====
			\$1,029

Sources: Sales / Advertising Brochures obtained
from various seminar services companies
throughout 1990

APPENDIX E
Advertising Analysis

NEURAL NETWORKING CONSULTANTS, INC.

ADVERTISING ANALYSIS - 1st YEAR

	Price Per Piece -----	Number of Names -----	Response -----	\$ Amount -----
Names to mail	\$0.20	1200	12	\$240
postage	\$0.25			\$300
paper, envelope, etc.	\$0.30			\$360
Total Per Seminar				----- \$900
Other Advertising				\$250
Total Cost per Seminar				===== \$1,150
Total Advertising Cost For 1st Year (assuming 10 seminars)				\$11,500
Advertising Cost Per Month				\$958 ===== =====

NEURAL NETWORKING CONSULTANTS, INC.

ADVERTISING ANALYSIS - 2nd YEAR

	Price Per Piece -----	Number of Names -----	Response -----	\$ Amount -----
Names to mail	\$0.25	1500	15	\$375
postage	\$0.30			\$450
paper, envelope, etc.	\$0.35			\$525
Total Per Seminar				----- \$1,350
Other Advertising				\$300
Total Cost per Seminar				=====
				\$1,650
Total Advertising Cost For 1st Year (assuming 15 seminars)				\$24,750
Advertising Cost Per Month				\$2,063
				=====
				=====

NEURAL NETWORKING CONSULTANTS, INC.

ADVERTISING ANALYSIS - 3rd YEAR

	Price Per Piece -----	Number of Names -----	Response -----	\$ Amount -----
Names to mail	\$0.30	1800	18	\$540
postage	\$0.30			\$540
paper, envelope, etc.	\$0.35			\$630
Total Per Seminar				----- \$1,710
Other Advertising				\$350
Total Cost per Seminar				===== \$2,060
Total Advertising Cost For 1st Year (assuming 20 seminars)				\$41,200
Advertising Cost Per Month				\$3,433 ===== =====

APPENDIX F
Start-Up Costs

NEURAL NETWORKING CONSULTANTS, INC.

STARTUP COSTS

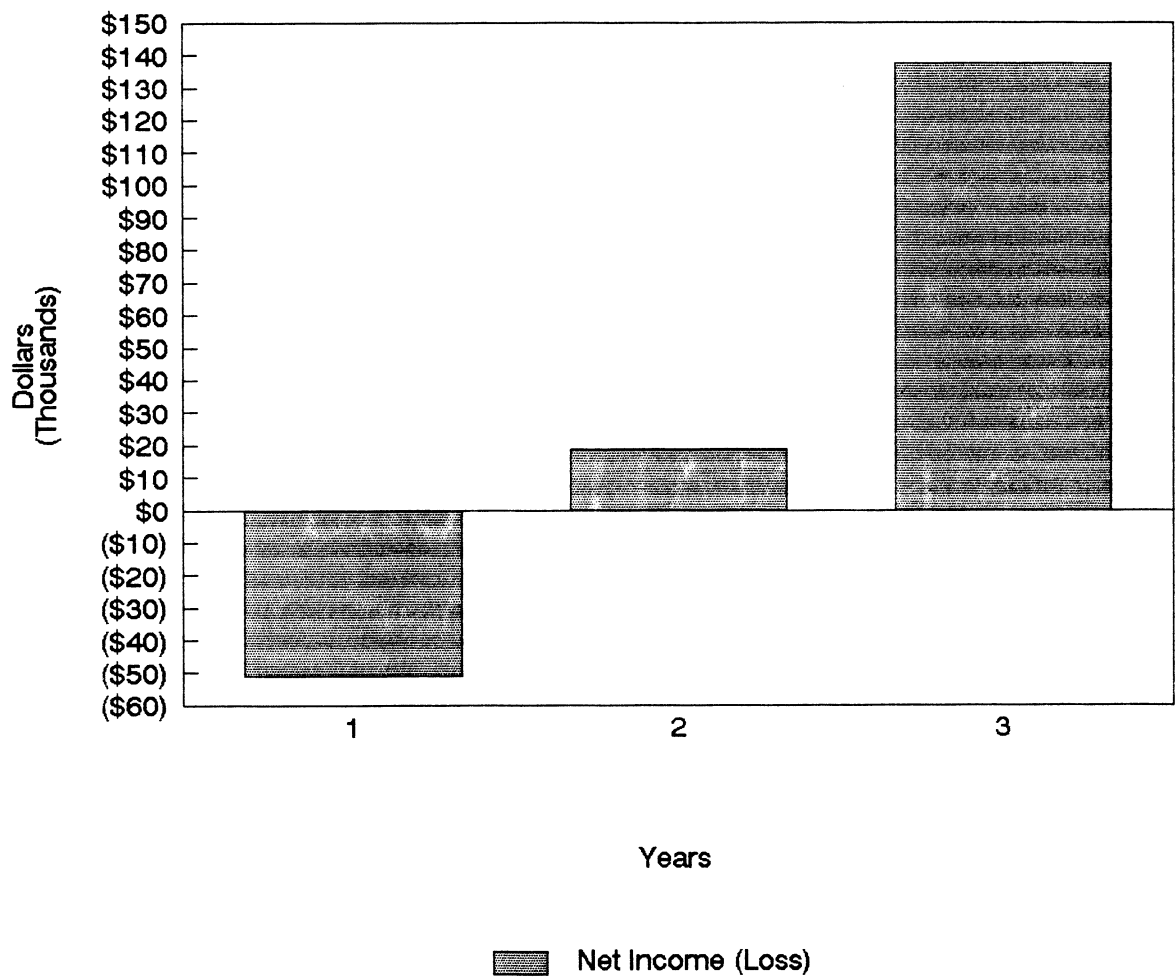
EQUIPMENT	INITIAL 3 MONTHS	1st MONTH OPERATION
-----	-----	-----
Telephone Equipment	\$300	
Compaq 386/33 Deskpro PC	\$5,000	
Apple MacIntosh II/CX	\$4,000	
Hewlett Packard Laser Printer	\$550	
Toshiba Laptop PC	\$2,800	
Laptop Printer	\$400	
Modem for Deskpro and Laptop	\$400	
Software	\$900	
PC Backup Machine	\$750	
Overheads Machine	\$400	
File Cabinet	\$300	
Photocopier	\$1,500	
Office Desks and Chairs	\$1,000	
Office Supplies (paper, etc.)	\$300	
	-----	-----
SUB-TOTAL	\$18,600	\$0
OTHER		

Retainer Fee - Lawyer	\$1,000	
Retainer Fee - Accountant	\$1,000	
Insurance	\$1,800	
Advertising Fees	\$2,000	\$1,000
Salaries (1st month)		\$9,000
Rent	\$1,000	\$700
Overhead	\$1,200	\$900
Travel	\$1,000	\$1,700
Payroll Taxes		\$900
Hotel - Seminar Facility		\$300
Miscellaneous	\$300	
	-----	-----
SUB-TOTAL	\$9,300	\$14,500
TOTAL	\$27,900	\$14,500
	=====	=====
GRAND TOTAL		\$42,400
		=====
		=====

APPENDIX G
Projected Income Statement

NNCI

Projected Income Statement - Summary



NEURAL NETWORKING CONSULTANTS, INC.

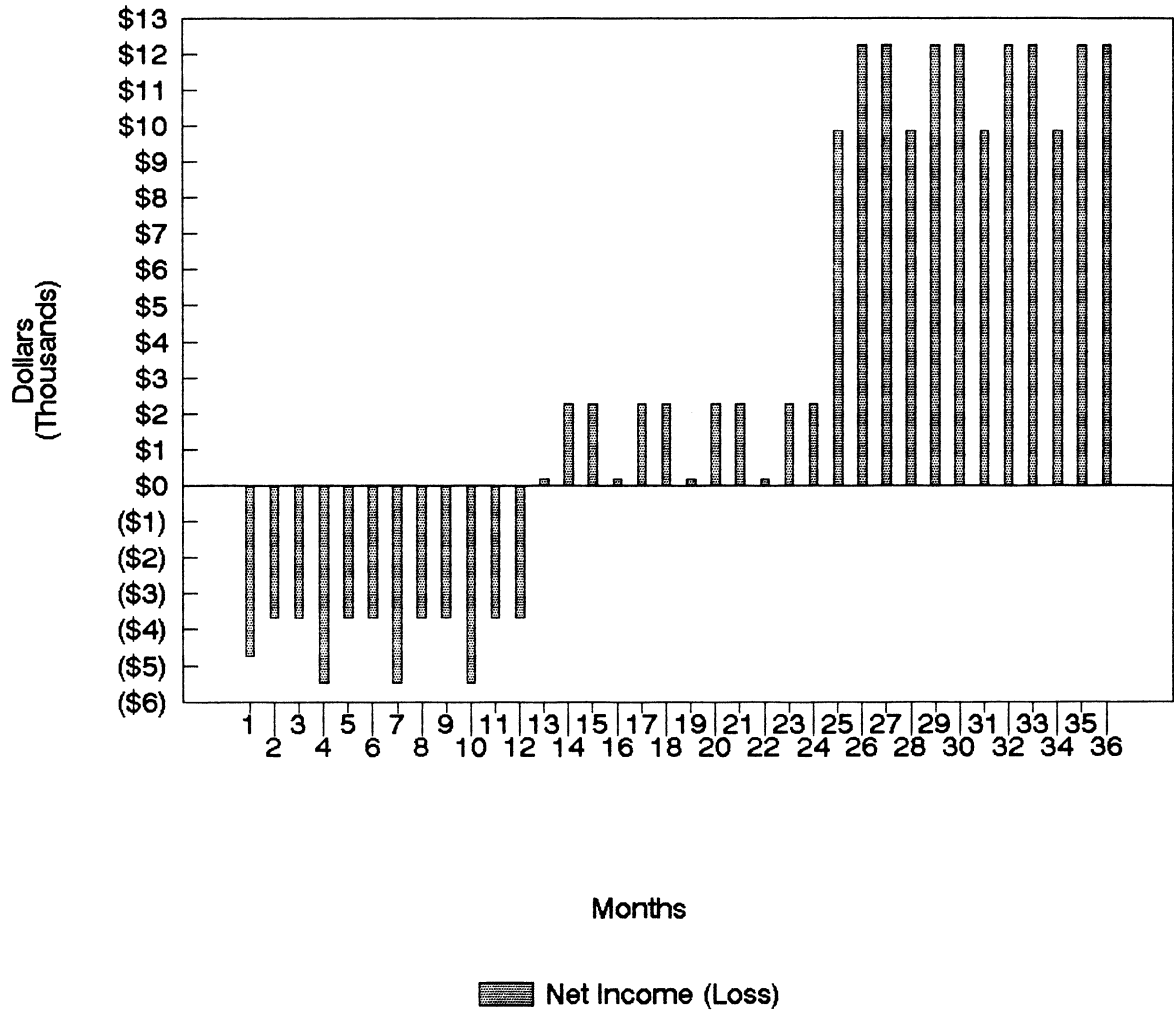
Net Income Projection - Summary

Item	Year 1 Total	Year 2 Total	Year 3 Total
Income:			
Seminar Income	\$120,000	\$247,500	\$432,000
Total Income (Sales)	\$120,000	\$247,500	\$432,000
Cost of Seminar Service:			
Salaries	\$93,204	\$119,172	\$149,760
Payroll Taxes	\$9,600	\$12,000	\$15,600
Supplies	\$3,600	\$4,800	\$6,000
Hotel Facility	\$3,600	\$4,200	\$4,800
Travel	\$19,992	\$30,000	\$39,996
Total Cost of Sales	\$129,996	\$170,172	\$216,156
Gross Margin	(\$9,996)	\$77,328	\$215,844
Other Operating Expenses:			
Overhead	\$10,800	\$11,880	\$13,068
Advertising Expense	\$12,538	\$24,744	\$41,196
Insurance Expense	\$5,400	\$8,400	\$9,600
Miscellaneous Expense	\$3,600	\$3,600	\$3,600
Rent	\$8,400	\$9,600	\$10,800
Total Operating Expenses	\$40,738	\$58,224	\$78,264
Net Income (Loss)	(\$50,734)	\$19,104	\$137,580

NOTE: Refer to the Financial Projections Section for detail on each of these items

NNCI

Projected Income Statement - Detail



NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement - Detail

Item	Months :												Year 1 Total
	1	2	3	4	5	6	7	8	9	10	11	12	
Income:													
Seminar Income	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$120,000
Total Income (Sales)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$120,000
Cost of Seminar Service:													
Salaries	\$7,767	\$7,767	\$7,767	\$7,767	\$7,767	\$7,767	\$7,767	\$7,767	\$7,767	\$7,767	\$7,767	\$7,767	\$93,204
Payroll Taxes	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$9,600
Supplies	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Hotel Facility	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Travel	\$1,666	\$1,666	\$1,666	\$1,666	\$1,666	\$1,666	\$1,666	\$1,666	\$1,666	\$1,666	\$1,666	\$1,666	\$19,992
Total Cost of Sales	\$10,833	\$10,833	\$10,833	\$10,833	\$10,833	\$10,833	\$10,833	\$10,833	\$10,833	\$10,833	\$10,833	\$10,833	\$129,996
Gross Margin	(\$833)	(\$833)	(\$833)	(\$833)	(\$833)	(\$833)	(\$833)	(\$833)	(\$833)	(\$833)	(\$833)	(\$833)	(\$9,996)
Other Operating Expenses:													
Overhead	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$10,800
Advertising Expense	\$2,000	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$12,538
Insurance Expense				\$1,800			\$1,800			\$1,800			\$5,400
Miscellaneous Expense	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$8,400
Total Operating Expenses	\$3,900	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$40,738
Net Income (Loss)	(\$4,733)	(\$3,691)	(\$3,691)	(\$5,491)	(\$3,691)	(\$3,691)	(\$5,491)	(\$3,691)	(\$3,691)	(\$5,491)	(\$3,691)	(\$3,691)	(\$50,734)

NOTE: Refer to the Financial Projections Section for detail on each of these items

NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement - Detail

Item	Months : 13	14	15	16	17	18	19	20	21	22	23	24	Year 2 Total
Income:													
Seminar Income	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$247,500
Total Income (Sales)	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$20,625	\$247,500
Cost of Seminar Service:													
Salaries	\$9,931	\$9,931	\$9,931	\$9,931	\$9,931	\$9,931	\$9,931	\$9,931	\$9,931	\$9,931	\$9,931	\$9,931	\$119,172
Payroll Taxes	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Supplies	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$4,800
Hotel Facility	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$4,200
Travel	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$30,000
Total Cost of Sales	\$14,181	\$14,181	\$14,181	\$14,181	\$14,181	\$14,181	\$14,181	\$14,181	\$14,181	\$14,181	\$14,181	\$14,181	\$170,172
Gross Margin	\$6,444	\$6,444	\$6,444	\$6,444	\$6,444	\$6,444	\$6,444	\$6,444	\$6,444	\$6,444	\$6,444	\$6,444	\$77,328
Other Operating Expenses:													
Overhead	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$11,880
Advertising Expense	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$24,744
Insurance Expense	\$2,100			\$2,100			\$2,100			\$2,100			\$8,400
Miscellaneous Expense	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$9,600
Total Operating Expenses	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$58,224
Net Income (Loss)	\$192	\$2,292	\$2,292	\$192	\$2,292	\$2,292	\$192	\$2,292	\$2,292	\$192	\$2,292	\$2,292	\$19,104

NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement - Detail

Item	Months : 25	26	27	28	29	30	31	32	33	34	35	36	Year 3 Total
Income:													
Seminar Income	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$432,000
Total Income (Sales)	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$432,000
Cost of Seminar Service:													
Salaries	\$12,480	\$12,480	\$12,480	\$12,480	\$12,480	\$12,480	\$12,480	\$12,480	\$12,480	\$12,480	\$12,480	\$12,480	\$149,760
Payroll Taxes	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$15,600
Supplies	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$6,000
Hotel Facility	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$4,800
Travel	\$3,333	\$3,333	\$3,333	\$3,333	\$3,333	\$3,333	\$3,333	\$3,333	\$3,333	\$3,333	\$3,333	\$3,333	\$39,996
Total Cost of Sales	\$18,013	\$18,013	\$18,013	\$18,013	\$18,013	\$18,013	\$18,013	\$18,013	\$18,013	\$18,013	\$18,013	\$18,013	\$216,156
Gross Margin	\$17,987	\$17,987	\$17,987	\$17,987	\$17,987	\$17,987	\$17,987	\$17,987	\$17,987	\$17,987	\$17,987	\$17,987	\$215,844
Other Operating Expenses:													
Overhead	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$13,068
Advertising Expense	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$41,196
Insurance Expense	\$2,400			\$2,400			\$2,400			\$2,400			\$9,600
Miscellaneous Expense	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$10,800
Total Operating Expenses	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$78,264
Net Income (Loss)	\$9,865	\$12,265	\$12,265	\$9,865	\$12,265	\$12,265	\$9,865	\$12,265	\$12,265	\$9,865	\$12,265	\$12,265	\$137,580

APPENDIX H
Alternative Income Scenarios

NEURAL NETWORKING CONSULTANTS, INC.

Net Income Projection - Summary

Item	Year 1 Total	Year 2 Total	Year 3 Total
Income:			
Seminar Income	\$168,000	\$356,400	\$633,600
Total Income (Sales)	\$168,000	\$356,400	\$633,600
Cost of Seminar Service:			
Salaries	\$96,876	\$125,364	\$158,976
Payroll Taxes	\$9,600	\$12,000	\$15,600
Supplies	\$4,800	\$6,000	\$7,200
Hotel Facility	\$3,600	\$4,200	\$4,800
Travel	\$24,000	\$36,000	\$48,000
Total Cost of Sales	\$138,876	\$183,564	\$234,576
Gross Margin	\$29,124	\$172,836	\$399,024
Other Operating Expenses:			
Overhead	\$10,800	\$11,880	\$13,068
Advertising Expense	\$12,538	\$24,744	\$41,196
Insurance Expense	\$5,400	\$8,400	\$9,600
Miscellaneous Expense	\$3,600	\$3,600	\$3,600
Rent	\$8,400	\$9,600	\$10,800
Total Operating Expenses	\$40,738	\$58,224	\$78,264
Net Income (Loss)	(\$11,614)	\$114,612	\$320,760

NOTES: This Statement reflects a "Better Than Expected" scenario based on a 20 % increase in students and seminars over our realistic projection;

NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement (By Month)

Item	Months : 1	2	3	4	5	6	7	8	9	10	11	12	Year 1 Total
Income:													
Seminar Income	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$168,000
Total Income (Sales)	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$168,000
Cost of Seminar Service:													
Salaries	\$8,073	\$8,073	\$8,073	\$8,073	\$8,073	\$8,073	\$8,073	\$8,073	\$8,073	\$8,073	\$8,073	\$8,073	\$96,876
Payroll Taxes	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$9,600
Supplies	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$4,800
Hotel Facility	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Travel	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$24,000
Total Cost of Sales	\$11,573	\$11,573	\$11,573	\$11,573	\$11,573	\$11,573	\$11,573	\$11,573	\$11,573	\$11,573	\$11,573	\$11,573	\$138,876
Gross Margin	\$2,427	\$2,427	\$2,427	\$2,427	\$2,427	\$2,427	\$2,427	\$2,427	\$2,427	\$2,427	\$2,427	\$2,427	\$29,124
Other Operating Expenses:													
Overhead	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$10,800
Advertising Expense	\$2,000	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$12,538
Insurance Expense				\$1,800			\$1,800			\$1,800			\$5,400
Miscellaneous Expense	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$8,400
Total Operating Expenses	\$3,900	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$40,738
Net Income (Loss)	(\$1,473)	(\$431)	(\$431)	(\$2,231)	(\$431)	(\$431)	(\$2,231)	(\$431)	(\$431)	(\$2,231)	(\$431)	(\$431)	(\$11,614)

NOTES: This Statement reflects a "Better Than Expected" scenario based on a 20 % increase in students and seminars over our realistic projection;

Refer to the Financial Projections Section for detail on each of these items

NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement (By Month)

Item	Months : 13	14	15	16	17	18	19	20	21	22	23	24	Year 2 Total
Income:													
Seminar Income	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$356,400
Total Income (Sales)	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$29,700	\$356,400
Cost of Seminar Service:													
Salaries	\$10,447	\$10,447	\$10,447	\$10,447	\$10,447	\$10,447	\$10,447	\$10,447	\$10,447	\$10,447	\$10,447	\$10,447	\$125,364
Payroll Taxes	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Supplies	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$6,000
Hotel Facility	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$4,200
Travel	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$36,000
Total Cost of Sales	\$15,297	\$15,297	\$15,297	\$15,297	\$15,297	\$15,297	\$15,297	\$15,297	\$15,297	\$15,297	\$15,297	\$15,297	\$183,564
Gross Margin	\$14,403	\$14,403	\$14,403	\$14,403	\$14,403	\$14,403	\$14,403	\$14,403	\$14,403	\$14,403	\$14,403	\$14,403	\$172,836
Other Operating Expenses:													
Overhead	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$11,880
Advertising Expense	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$24,744
Insurance Expense	\$2,100			\$2,100			\$2,100			\$2,100			\$8,400
Miscellaneous Expense	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$9,600
Total Operating Expenses	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$58,224
Net Income (Loss)	\$8,151	\$10,251	\$10,251	\$8,151	\$10,251	\$10,251	\$8,151	\$10,251	\$10,251	\$8,151	\$10,251	\$10,251	\$114,612

NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement (By Month)

Item	Months : 25	26	27	28	29	30	31	32	33	34	35	36	Year 3 Total
Income:													
Seminar Income	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$633,600
Total Income (Sales)	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$52,800	\$633,600
Cost of Seminar Service:													
Salaries	\$13,248	\$13,248	\$13,248	\$13,248	\$13,248	\$13,248	\$13,248	\$13,248	\$13,248	\$13,248	\$13,248	\$13,248	\$158,976
Payroll Taxes	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$15,600
Supplies	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$7,200
Hotel Facility	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$4,800
Travel	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$48,000
Total Cost of Sales	\$19,548	\$19,548	\$19,548	\$19,548	\$19,548	\$19,548	\$19,548	\$19,548	\$19,548	\$19,548	\$19,548	\$19,548	\$234,576
Gross Margin	\$33,252	\$33,252	\$33,252	\$33,252	\$33,252	\$33,252	\$33,252	\$33,252	\$33,252	\$33,252	\$33,252	\$33,252	\$399,024
Other Operating Expenses:													
Overhead	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$13,068
Advertising Expense	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$41,196
Insurance Expense	\$2,400			\$2,400			\$2,400			\$2,400			\$9,600
Miscellaneous Expense	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$10,800
Total Operating Expenses	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$78,264
Net Income (Loss)	\$25,130	\$27,530	\$27,530	\$25,130	\$27,530	\$27,530	\$25,130	\$27,530	\$27,530	\$25,130	\$27,530	\$27,530	\$320,760

NEURAL NETWORKING CONSULTANTS, INC.

Net Income Projection - Summary

Item	Year 1 Total	Year 2 Total	Year 3 Total
Income:			
Seminar Income	\$80,000	\$158,400	\$268,800
Total Income (Sales)	\$80,000	\$158,400	\$268,800
Cost of Seminar Service:			
Salaries	\$89,604	\$97,980	\$107,484
Payroll Taxes	\$9,600	\$12,000	\$14,400
Supplies	\$2,400	\$3,600	\$4,800
Hotel Facility	\$3,600	\$4,200	\$4,800
Travel	\$15,996	\$24,000	\$32,004
Total Cost of Sales	\$121,200	\$141,780	\$163,488
Gross Margin	(\$41,200)	\$16,620	\$105,312
Other Operating Expenses:			
Overhead	\$10,800	\$11,880	\$13,068
Advertising Expense	\$12,538	\$24,744	\$41,196
Insurance Expense	\$5,400	\$8,400	\$9,600
Miscellaneous Expense	\$3,600	\$3,600	\$3,600
Rent	\$8,400	\$9,600	\$10,800
Total Operating Expenses	\$40,738	\$58,224	\$78,264
Net Income (Loss)	(\$81,938)	(\$41,604)	\$27,048

NOTE: This statement reflects a "Poorer Than Expected" scenario based on a 20 % decrease in students and seminars over our realistic projection;

NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement (By Month)

Item	Months :	1	2	3	4	5	6	7	8	9	10	11	12	Year 1 Total
Income:														
Seminar Income		\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$80,000
Total Income (Sales)		\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$6,667	\$80,000
Cost of Seminar Service:														
Salaries		\$7,467	\$7,467	\$7,467	\$7,467	\$7,467	\$7,467	\$7,467	\$7,467	\$7,467	\$7,467	\$7,467	\$7,467	\$89,604
Payroll Taxes		\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$9,600
Supplies		\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$2,400
Hotel Facility		\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Travel		\$1,333	\$1,333	\$1,333	\$1,333	\$1,333	\$1,333	\$1,333	\$1,333	\$1,333	\$1,333	\$1,333	\$1,333	\$15,996
Total Cost of Sales		\$10,100	\$10,100	\$10,100	\$10,100	\$10,100	\$10,100	\$10,100	\$10,100	\$10,100	\$10,100	\$10,100	\$10,100	\$121,200
Gross Margin		(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$3,433)	(\$41,200)
Other Operating Expenses:														
Overhead		\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$10,800
Advertising Expense		\$2,000	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$958	\$12,538
Insurance Expense					\$1,800			\$1,800		\$1,800				\$5,400
Miscellaneous Expense		\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent		\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$8,400
Total Operating Expenses		\$3,900	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$4,658	\$2,858	\$2,858	\$40,738
Net Income (Loss)		(\$7,333)	(\$6,291)	(\$6,291)	(\$8,091)	(\$6,291)	(\$6,291)	(\$8,091)	(\$6,291)	(\$6,291)	(\$8,091)	(\$6,291)	(\$6,291)	(\$81,938)

NOTE: This statement reflects a "Poorer Than Expected" scenario based on a 20 % decrease in students and seminars over our realistic projection;

Refer to the Financial Projections Section for detail on each of these items

NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement (By Month)

Item	Months : 13	14	15	16	17	18	19	20	21	22	23	24	Year 2 Total
Income:													
Seminar Income	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$158,400
Total Income (Sales)	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	\$158,400
Cost of Seminar Service:													
Salaries	\$8,165	\$8,165	\$8,165	\$8,165	\$8,165	\$8,165	\$8,165	\$8,165	\$8,165	\$8,165	\$8,165	\$8,165	\$97,980
Payroll Taxes	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Supplies	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Hotel Facility	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$4,200
Travel	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$24,000
Total Cost of Sales	\$11,815	\$11,815	\$11,815	\$11,815	\$11,815	\$11,815	\$11,815	\$11,815	\$11,815	\$11,815	\$11,815	\$11,815	\$141,780
Gross Margin	\$1,385	\$1,385	\$1,385	\$1,385	\$1,385	\$1,385	\$1,385	\$1,385	\$1,385	\$1,385	\$1,385	\$1,385	\$16,620
Other Operating Expenses:													
Overhead	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$990	\$11,880
Advertising Expense	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$2,062	\$24,744
Insurance Expense	\$2,100			\$2,100			\$2,100			\$2,100			\$8,400
Miscellaneous Expense	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$9,600
Total Operating Expenses	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$6,252	\$4,152	\$4,152	\$58,224
Net Income (Loss)	(\$4,867)	(\$2,767)	(\$2,767)	(\$4,867)	(\$2,767)	(\$2,767)	(\$4,867)	(\$2,767)	(\$2,767)	(\$4,867)	(\$2,767)	(\$2,767)	(\$41,604)

NEURAL NETWORKING CONSULTANTS, INC.

Projected Income Statement (By Month)

Item	Months : 25	26	27	28	29	30	31	32	33	34	35	36	Year 3 Total
Income:													
Seminar Income	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$268,800
Total Income (Sales)	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$22,400	\$268,800
Cost of Seminar Service:													
Salaries	\$8,957	\$8,957	\$8,957	\$8,957	\$8,957	\$8,957	\$8,957	\$8,957	\$8,957	\$8,957	\$8,957	\$8,957	\$107,484
Payroll Taxes	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$14,400
Supplies	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$4,800
Hotel Facility	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$4,800
Travel	\$2,667	\$2,667	\$2,667	\$2,667	\$2,667	\$2,667	\$2,667	\$2,667	\$2,667	\$2,667	\$2,667	\$2,667	\$32,004
Total Cost of Sales	\$13,624	\$13,624	\$13,624	\$13,624	\$13,624	\$13,624	\$13,624	\$13,624	\$13,624	\$13,624	\$13,624	\$13,624	\$163,488
Gross Margin	\$8,776	\$8,776	\$8,776	\$8,776	\$8,776	\$8,776	\$8,776	\$8,776	\$8,776	\$8,776	\$8,776	\$8,776	\$105,312
Other Operating Expenses:													
Overhead	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$1,089	\$13,068
Advertising Expense	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$3,433	\$41,196
Insurance Expense	\$2,400			\$2,400			\$2,400			\$2,400			\$9,600
Miscellaneous Expense	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,600
Rent	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$10,800
Total Operating Expenses	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$8,122	\$5,722	\$5,722	\$78,264
Net Income (Loss)	\$654	\$3,054	\$3,054	\$654	\$3,054	\$3,054	\$654	\$3,054	\$3,054	\$654	\$3,054	\$3,054	\$27,048

APPENDIX I
Yearly Salary Projections

NEURAL NETWORKING CONSULTANTS, INC.

YEARLY COMPENSATION PROJECTION

Alternative # 1

SALARIES (Gross Figures) :

Variable 1 : 10 = Projected # of Seminars 1st Year
 Variable 2 : 15 = Projected # of Seminars 2nd Year
 Variable 3 : 20 = Projected # of Seminars 3rd Year
 Variable 4 : 1.2 = Projected Yearly Compensation Increase

	Year #1 Projection : *****	Year #2 Projection : *****	Year #3 Projection : *****
President	\$28,000 per year fixed	\$33,600 per year	\$40,320 per year
Chief Instructor	\$1,600 per seminar 10 seminars/yr \$120 1% of gross bonus ----- \$17,200 per year	\$1,700 per seminar 15 seminars/yr \$165 1% of gross bonus ----- \$27,975 per year	\$1,800 per seminar 20 seminars/yr \$216 1% of gross bonus ----- \$40,320 per year
Vice-Pres. - Marketing	\$24,000 per year	\$28,800 per year	\$34,560 per year
Vice-Pres. - Administration	\$24,000 per year	\$28,800 per year	\$34,560 per year
Total For Year:	\$93,200	\$119,175	\$149,760
Total / Mnth:	\$7,767	\$9,931	\$12,480

NEURAL NETWORKING CONSULTANTS, INC.

YEARLY COMPENSATION PROJECTION

Alternative # 2

SALARIES (Gross Figures) :

Variable 1 : 10 = Projected # of Seminars 1st Year
 Variable 2 : 15 = Projected # of Seminars 2nd Year
 Variable 3 : 20 = Projected # of Seminars 3rd Year
 Variable 4 : 1.2 = Projected Yearly Compensation Increase

	Year #1 Projection : *****	Year #2 Projection : *****	Year #3 Projection : *****
President	\$28,000 per year fixed	\$33,600 per year	\$40,320 per year
Chief Instructor	\$1,600 per seminar 10 seminars/yr \$120 1% of gross bonus ----- \$17,200 per year	\$1,700 per seminar 15 seminars/yr \$165 1% of gross bonus ----- \$27,975 per year	\$1,800 per seminar 20 seminars/yr \$216 1% of gross bonus ----- \$40,320 per year
Vice-Pres. - Marketing	\$23,000 per year \$120 1% of gross bonus ----- \$24,200 per year	\$27,600 per year \$165 1% of gross bonus ----- \$30,075 per year	\$33,120 per year \$216 1% of gross bonus ----- \$37,440 per year
Vice-Pres. - Administration	\$23,000 per year \$120 1% of gross bonus ----- \$24,200 per year	\$27,600 per year \$165 1% of gross bonus ----- \$30,075 per year	\$33,120 per year \$216 1% of gross bonus ----- \$37,440 per year
Total For Year:	\$93,600	\$121,725	\$155,520
Total / Mnth:	\$7,800	\$10,144	\$12,960

APPENDIX J
Alternative Salary Scenarios

NEURAL NETWORKING CONSULTANTS, INC.

YEARLY COMPENSATION PROJECTION

BETTER THAN EXPECTED SCENARIO

SALARIES (Gross Figures) :

Variable 1 : 12 = Projected # of Seminars 1st Year
 Variable 2 : 18 = Projected # of Seminars 2nd Year
 Variable 3 : 24 = Projected # of Seminars 3rd Year
 Variable 4 : 1.2 = Projected Yearly Compensation Increase

	Year #1 Projection : *****	Year #2 Projection : *****	Year #3 Projection : *****
President	\$28,000 per year fixed	\$33,600 per year	\$40,320 per year
Chief Instructor	\$1,600 per seminar 12 seminars/yr \$140 1% of gross bonus ----- \$20,880 per year	\$1,700 per seminar 18 seminars/yr \$198 1% of gross bonus ----- \$34,164 per year	\$1,800 per seminar 24 seminars/yr \$264 1% of gross bonus ----- \$49,536 per year
Vice-Pres. - Marketing	\$24,000 per year	\$28,800 per year	\$34,560 per year
Vice-Pres. - Administration	\$24,000 per year	\$28,800 per year	\$34,560 per year
Total For Year:	\$96,880	\$125,364	\$158,976
Total / Mnth:	\$8,073	\$10,447	\$13,248

NEURAL NETWORKING CONSULTANTS, INC.

YEARLY COMPENSATION PROJECTION

POORER THAN EXPECTED SENARIO

SALARIES (Gross Figures) :

Variable 1 : 8 = Projected # of Seminars 1st Year
 Variable 2 : 12 = Projected # of Seminars 2nd Year
 Variable 3 : 16 = Projected # of Seminars 3rd Year
 Variable 4 : 1.2 = Projected Yearly Compensation Increase

	Year #1 Projection : *****	Year #2 Projection : *****	Year #3 Projection : *****
President	\$28,000 per year fixed	\$28,000 per year	\$28,000 per year
Chief Instructor	\$1,600 per seminar 8 seminars/yr \$100 1% of gross bonus ----- \$13,600 per year	\$1,700 per seminar 12 seminars/yr \$132 1% of gross bonus ----- \$21,984 per year	\$1,800 per seminar 16 seminars/yr \$168 1% of gross bonus ----- \$31,488 per year
Vice-Pres. - Marketing	\$24,000 per year	\$24,000 per year	\$24,000 per year
Vice-Pres. - Administration	\$24,000 per year	\$24,000 per year	\$24,000 per year
Total For Year:	\$89,600	\$97,984	\$107,488
Total / Mnth:	\$7,467	\$8,165	\$8,957

APPENDIX K
Travel Budget

NNCI
TRAVEL BUDGET

	Year 1	Year 2	Year 3
	-----	-----	-----
Number of seminars/yr	10	15	20
Ave. # of seminars/mth	0.83	1.25	1.67
Cost per seminar	\$2,000.00	\$2,000.00	\$2,000.00
Average Cost per month	\$1,666.67	\$2,500.00	\$3,333.33
	=====	=====	=====
Travel cost per year	\$20,000.00	\$30,000.00	\$40,000.00

APPENDIX L
Alternative Travel Budgets

NNCI
TRAVEL BUDGET
BETTER THAN EXPECTED SCENARIO

	Year 1 -----	Year 2 -----	Year 3 -----
Number of seminars/yr	12	18	24
Ave. # of seminars/mth	1.00	1.50	2.00
Cost per seminar	\$2,000.00	\$2,000.00	\$2,000.00
Average Cost per month	\$2,000.00	\$3,000.00	\$4,000.00
Travel cost per year	=====	=====	=====
	\$24,000.00	\$36,000.00	\$48,000.00

NNCI
TRAVEL BUDGET
POORER THAN EXPECTED SCENARIO

	Year 1	Year 2	Year 3
	-----	-----	-----
Number of seminars/yr	8	12	16
Ave. # of seminars/mth	0.67	1.00	1.33
Cost per seminar	\$2,000.00	\$2,000.00	\$2,000.00
Average Cost per month	\$1,333.33	\$2,000.00	\$2,666.67
	=====	=====	=====
Travel cost per year	\$16,000.00	\$24,000.00	\$32,000.00